

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025897**Date Inspected:** 11-Aug-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Fred Vonhoff / William Sherwood			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	OBG Components		

Summary of Items Observed:

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

In Process Visual Inspection

This QA randomly observed ABF/JV qualified welder Mike Jiminez #4671 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1110A-R1. The joint being welded was a 14mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at 10E-PP88-E4 and was performed in the overhead position from the bottom side of the "A" deck.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=135/V=22).

Note:

Approximately 8:15 this QA observed QC Fred Vonhoff perform Magnetic Particle (MT) of completed welds at this panel point 80 location. The welds were completed the previous work day by ABF welding personnel Salvador Sandoval #2202 and were ground flush prior to Mr. Vonhoff performing MT. Mr. Vonhoff recorded no rejectable indications at this time.

This QA randomly observed ABF/JV qualified welder Salvador Sandoval #2202 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding

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Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. The joint being welded was a 14mm plate insert at the "A" deck to close the lifting lug deck penetration holes. This work was located at 10E-PP92-E3 and was performed in the flat position from the top side of the "A" deck.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=135/V=22.1).

11E/12E

This QA randomly observed ABF/JV qualified welder Hua Qiang Huang #2930 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joint being welded was a 14mm thick internal longitudinal stiffener but splice designated as L#4 on the "E" side plate, 11E/12E segment splice location.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=136/V=22.3).

This QA randomly observed ABF/JV qualified welder Xiao Jian Wan #9677 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joint being welded was a 30mm thick internal longitudinal stiffener but splice designated as L#1 on the "C" side of "A" plate, 11E/12E segment splice location.

During welding, ABF Quality Control (QC) Fred Vonhoff was noted monitoring the welding parameters. Welding parameters were recorded as (A=135/V=22).

Note:

This QA randomly observed that ABF welding personnel Mr. Wan completed the welding of the L#1 at approximately 10:00. Mr. Wan continued welding operations on the stiffener designated as L#2. This QA noted there is an unresolved Non Conformance Report (NCR) for this L#2 joint at this time.

This QA randomly observed ABF/JV qualified welder Fred Kaddu #2188 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1001-R. . The joint being welded was in the 3G vertical position at the side plate E1/E2 on the inside of the OBG 11E/12E.

Y= 1030mm~1060mm at E1.

Y= 4877mm~4887mm at E2.

During welding, ABF Quality Control (QC) William Sherwood was noted monitoring the welding parameters. Welding parameters were recorded as (A=136/V=22).

Ultrasonic Testing

This QA also performed Ultrasonic Testing (UT) on approximately 10% of CJP's of 14mm plate inserts at the "A" deck previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Locations of welds:

-10E, Panel Point 88, E3 #1 external

-10E, Panel Point 88, E3 #2 external

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- 10E, Panel Point 88, E3 #3 external
- 10E, Panel Point 88, E3 #4 external
- 10E, Panel Point 92, E4 #1 external
- 10E, Panel Point 92, E4 #3 external
- 10E, Panel Point 92, E4 #4 external

Magnetic Particle Testing

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 25% of the area previously tested by QC Ultrasonic technicians. This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Locations of welds:

- 10E, Panel Point 88, E3 #1 external
- 10E, Panel Point 88, E3 #2 external
- 10E, Panel Point 88, E3 #3 external
- 10E, Panel Point 88, E3 #4 external
- 10E, Panel Point 92, E4 #1 external
- 10E, Panel Point 92, E4 #3 external
- 10E, Panel Point 92, E4 #4 external

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
